DOCUMENT RESUME

ED 435 666 TM 030 293

TITLE	Virginia Standards of Learning Assessments. End of Course Released Test Items, 1998.
INSTITUTION	Virginia State Dept.of Education, Richmond. Div. of Assessment and Reporting.
REPORT NO	VDOE-99983-17-797
PUB DATE	1999-00-00
NOTE	31p.; For other released items, see TM 030 290-292.
AVAILABLE FROM	For full text: <http://www.pen.k12.va.us/VDOE/Assessment/releaseditems/index.html>.
PUB TYPE	Book/Product Reviews (072)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Academic Standards; Achievement Tests; Algebra; Biology; Chemistry; Earth Science; Geometry; High Schools; Reading Tests; Sciences; Social Studies; State Programs; *State Standards; *Test Items; *Testing Programs; United States History; World History; Writing Tests
IDENTIFIERS	*Virginia Standards of Learning Program

ABSTRACT

Beginning in Spring 1998, Virginia students participated in the Standards of Learning (SOL) assessments designed to test student knowledge of the content and skills specified in the state's standards. This document contains questions that students were required to answer as part of the SOL End-of-Course assessments. These questions are representative of the SOL tests and are provided to demonstrate the format of the test questions. Sample items are presented from: the English test for Reading/Literature; Writing; Algebra I; Geometry; Algebra II; United States History; World History to 1000 A.D. (Geography); World History from 1000 A.D. to the Present (Geography); Biology; Earth Science; and Chemistry. A page with correct test answers is included. (SLD)

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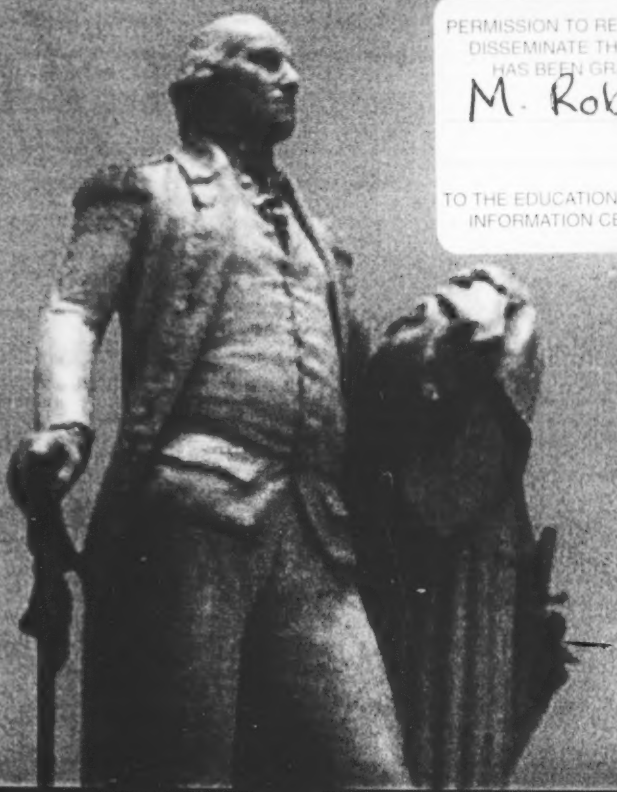

End of Course

RELEASED ITEMS *1998*

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Introducing the VIRGINIA STANDARDS OF LEARNING

End-of-Course Assessment

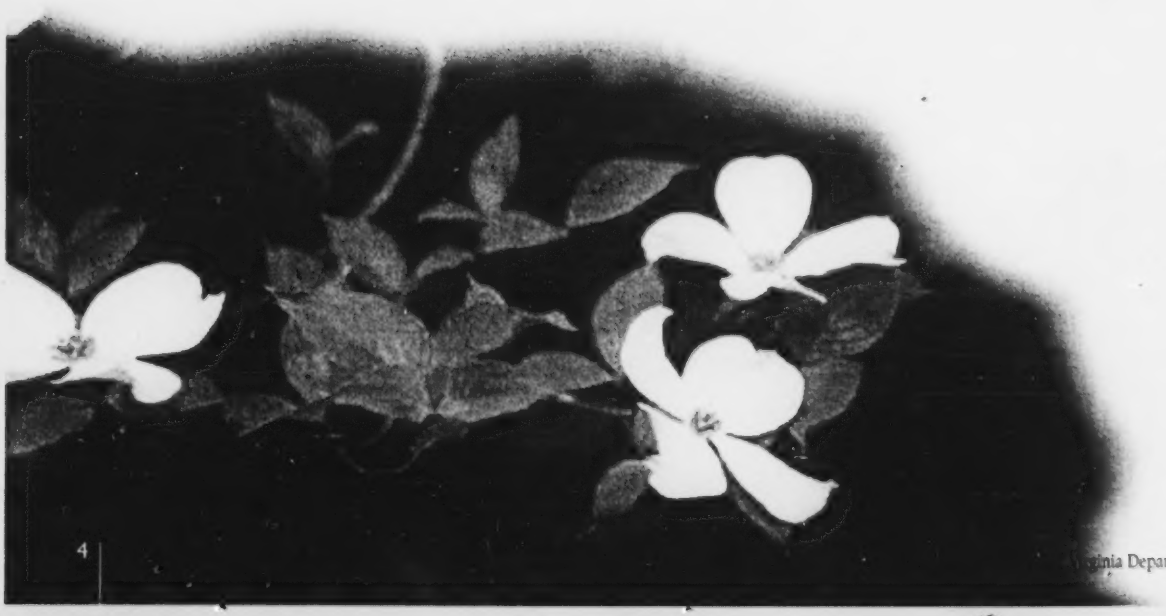
Our goal in Virginia is to raise student achievement through accountability for results so that *all* our schoolchildren, not just a lucky few, will be prepared to compete successfully in the global economy of the 21st century. With a desire to accomplish this goal, more than 5,000 qualified teachers, parents, business professionals, and others worked together to develop the nationally acclaimed Virginia Standards of Learning (SOL). Designed to provide Virginia students with a content-rich, rigorous academic foundation, these standards were adopted by the Board of Education in 1995.

Beginning in the Spring of 1998, students participated in the *Virginia Standards of Learning Assessments*. These assessments were designed to test student knowledge of the content information and skills specified in the Virginia Standards. Student proficiency in the academic areas of English, Mathematics, History and Social Science, and Science was and continues to be evaluated by these tests.

The SOL Assessments enable parents, teachers, and students to evaluate student knowledge and better prepare them for success.

Sample items for the end-of-course tests

On the following pages you will find questions that students were asked to answer as part of the Spring 1998 *Virginia Standards of Learning (SOL) End-of-Course Assessments*. These questions are representative of the content and skills included in the Virginia SOL tests and are provided to help you understand the format of the test questions.



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The Spring 1998 SOL tests marked the first statewide administration of these questions and others like them in the following content areas:

- English: Reading/Literature and Research; and English: Writing
- Algebra I; Geometry; and Algebra II
- United States History; World History to 1000 A.D./World Geography; and World History from 1000 A.D. to the Present/World Geography
- Biology; Earth Science; and Chemistry

Each question on an SOL test was assigned to a Reporting Category. A Reporting Category addresses related content or skills in the Standards of Learning. For example, a Reporting Category for the Algebra I test is Statistics. The standards in this Reporting Category include using matrices to organize and manipulate data; writing equations for a line of best fit and using the equations to make predictions; and comparing multiple one-variable sets. Each test question in this booklet is identified with its Reporting Category. There are some Reporting Categories for which test questions have not yet been released.

A key for the correct answers to questions is on page 30 of this document.

All questions are multiple-choice, except for a writing prompt which asks students to write a composition. Every test question used on an SOL test is:

- reviewed and approved by a committee of Virginia teachers
- field tested (or tried out) with Virginia students
- reviewed again by Virginia teachers
- reviewed once again after the tests are put together.

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ENGLISH:

Reading/Literature and Research Test

On the End-of-Course English: Reading/Literature and Research Test, students read a small number of reading selections and answer multiple-choice questions about these selections. The test includes a variety of types of reading, such as fiction, nonfiction, poetry, and drama. Everyday text, such as instructions or an order form, may be used.

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ENGLISH: *Reading/Literature and Research Test* – *continued*

The reading passage to which the test items on page 8 refer is "Cat in the Rain," by Ernest Hemingway, from *In Our Time*. (Copyright 1925 Charles Scribner's Sons. Copyright renewed 1953 by Ernest Hemingway.) The passage was reprinted by permission of Scribner, a division of Simon and Schuster, Inc.

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ENGLISH: *Reading/Literature and Research Test — continued*

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The questions on the End-of-Course Reading test cover the English Standards of Learning for grades 9, 10, and 11. The questions accompanying this reading selection are all from the Reporting Category called Understand Elements of Literature.

There are no questions available for release from the two other Reporting Categories:

- Understand a Variety of Printed Materials/Resource Materials, which addresses understanding and analyzing a variety of types of reading passages
- Locate and Use Information from a Variety of Resource Materials, which includes questions about research papers similar to those students write

1 Which term *best* describes the attitude of the hotel owner?

A Rude
B Greedy
C Accommodating
D Humble

2 The wife is *best* described as —

F lonely
G cynical
H ingenious
J content

3 What detail about the hotel owner *most* appeals to George's wife?

A His wealth
B His foolishness
C His handsome features
D His graciousness

4 The interactions between George and his wife indicate that they —

F are having financial troubles
G have different values
H enjoy traveling together
J are intellectual equals

5 Hemingway, author of this story, was a member of the —

A Beat Generation
B Lost Generation
C Generation X
D Younger Generation

6 The author's style is characterized by —

F short, simple sentences
G flowery, descriptive adjectives
H melodramatic dialogue
J long, ponderous, technical words

7 Ernest Hemingway, like other expatriate American writers, set his story in Europe in order to illustrate Europe's —

A modern technology
B social materialism
C economical commercialism
D cultural richness

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ENGLISH: *Writing Test*

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The End-of-Course English: Writing test includes two components: a multiple-choice component and a direct-writing component in which students write a composition about a topic presented to them in a writing prompt. The writing prompt administered in Spring 1998 is on page 12.

Multiple-Choice Component

The questions included in the multiple-choice component are designed to mirror the process students follow as they write their own compositions. Students are presented with a writing task, followed by a test question like Question 1 shown below that addresses activities students might pursue as they prepare to write. This question is followed by a rough draft of a response to the writing task, written by a fictional student.

RELEASED ▼ ITEMS

When Grandma Graduated

Chen has decided to enter a writing contest. He wants to write a story about a family member who has had to overcome an obstacle to reach a personal goal.

1 Which of these would *best* help Chen get started on his story?

A Watching a video about families
B Writing the rough draft of his story
C Listing family members he would like to write about
D Thinking of a title for his story

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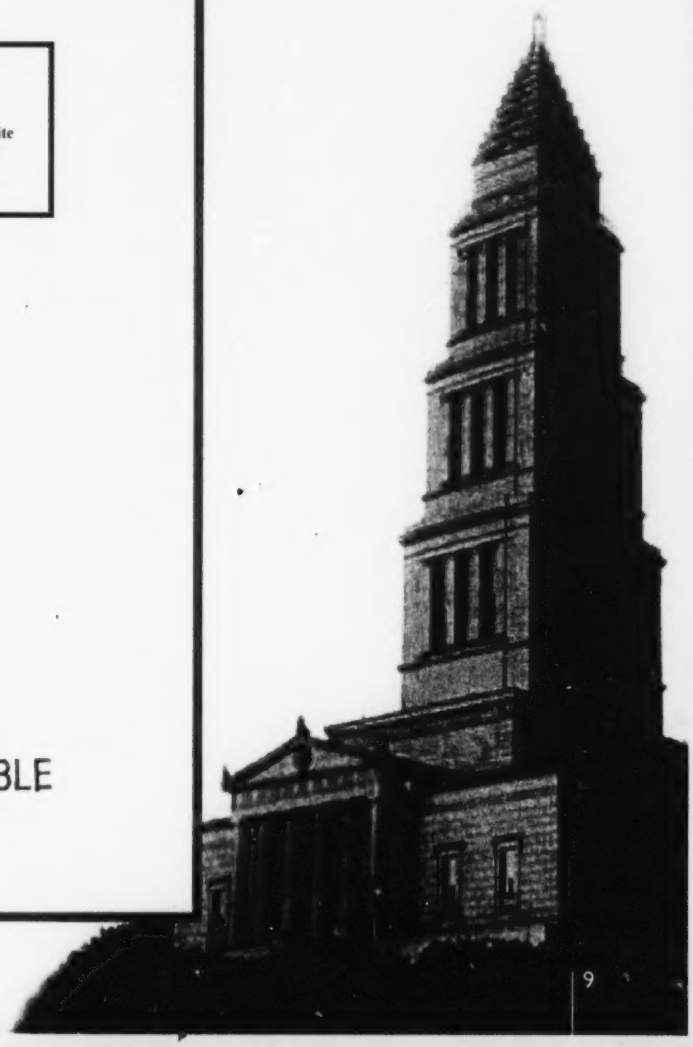

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ENGLISH: *Writing Test – continued*

The rough draft is divided into two sections. The first section, which is shown below, contains errors such as an incorrectly written sentence or two sentences that need to be combined. Test items that follow this section require the students to correct these errors by choosing the correct revision from the choices provided.

The questions from the Spring 1998 test that are shown on these pages are in these Reporting Categories:

- Plan, Compose, and Revise in a Variety of Forms for a Variety of Purposes *(question 1 on page 9; questions 2, 3, 4, and 5 below)*
- Edit for Correct Use of Language, Capitalization, Punctuation, and Spelling *(questions 6, 7, 8, and 9)*

RELEASED ▼ ITEMS

Here is the first part of Chen's rough draft. Use it to answer questions 2–5.

(1)I felt proud when she walked across the stage to shake hands with the principal. (2)That ceremony was certainly important, and I realized that I was witnessing a unique event. (3)I was actually watching my grandmother graduate from high school. (4)After all, you have to complete high school before you can go to college.

(5)Grandma had waited nearly 60 years to receive her diploma. (6)She had to, in order to help her family make ends meet, when she was 15, quit school and find a job. (7)After seeing two of her grandchildren complete high school. (8)She decided it was time for her to continue her education. (9)I was glad to see Grandma return to school again. (10)Although she was enrolled in an adult education program and didn't attend any of my classes, we still found it helpful to study together.

2 In sentence 2, how can important be rewritten to be more specific?

F rather significant
G quite important
H really significant to her
J one of the highlights of her life

3 Which sentence contains information that is *least* relevant to Chen's story?

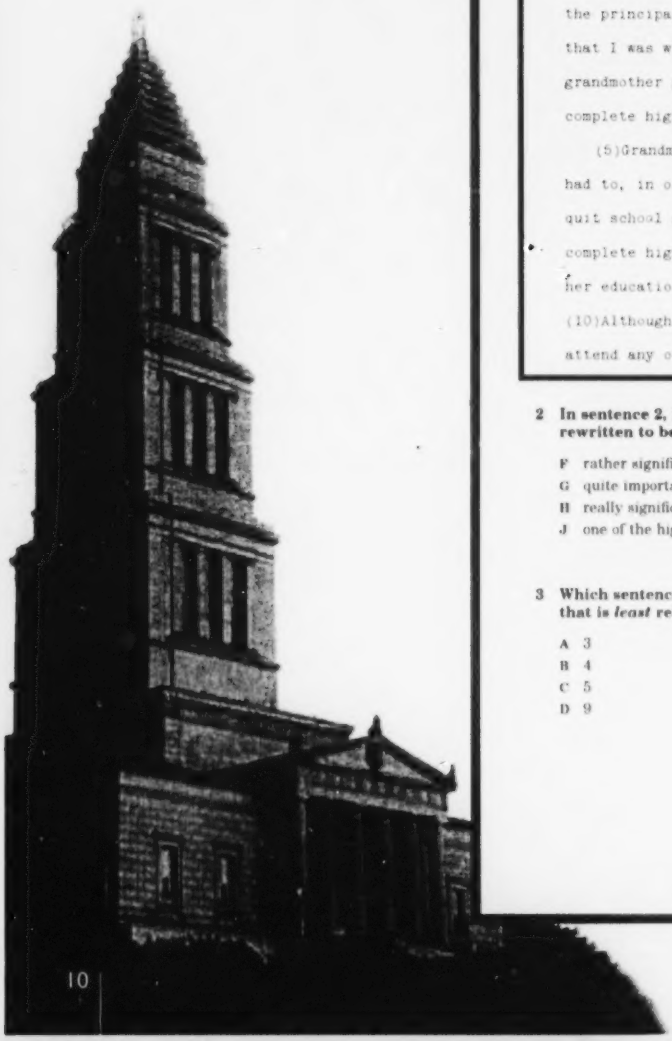
A 3
B 4
C 5
D 9

4 Which of the following is *not* a sentence?

F 2
G 4
H 7
J 10

5 How is sentence 6 *best* rewritten?

A To help her family make ends meet, when she was 15, in order to find a job, she had to quit school.
B In order to help her family make ends meet, when she was 15, she had to quit school and she had to find a job.
C When she was 15, she had to quit school and find a job in order to help her family make ends meet.
D She had to quit school and find a job, in order to help her family make ends meet, when she was 15.



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ENGLISH: *Writing Test* – *continued*

The second section of the rough draft includes errors in grammar, capitalization, spelling, and punctuation. Items following this section refer to underlined words in the rough draft and require the student to choose the answer that includes correct grammar and mechanics. In some cases the underlined word or words will include no error, and the correct answer is "as it is."

Questions 6, 7, 8, and 9 are in the Reporting Category of Edit for Correct Use of Language, Capitalization, Punctuation, and Spelling.

RELEASED ITEMS

Read this next section of Chen's rough draft and answer questions 6–9. This section has groups of underlined words. The questions ask about these groups of underlined words.

(11)Grandma, in many ways, was like a typical high school student. (12)For example, she discovered some subject's to be easy and others to be really difficult. (13)Algebra was particularly hard for her, and she struggled to maintain a high grade in that class. (14)Fortunately, I am good in math and was able to tutor her.

(15)Grandma is truely an inspiration to me. (16)Her determination to complete a lifelong dream helped her to graduate with honors. (17)As I look forward to my senior year, I only hope some of that determination has rubbed off on me.

6 In sentence 11, typical high school student is correctly written —

F typical High School student
G typical High school student
H typical High School Student
J as it is

7 In sentence 12, she discovered some subject's is correctly written —

A she discovers some subject's
B she discovered some subjects
C she discovers some subjects
D as it is

8 In sentence 15, Grandma is truely an inspiration is correctly written —

F Grandma is truley an inspiration
G Grandma is truely a inspiration
H Grandma is truly an inspiration
J as it is

9 In sentence 17, look forward to my senior year is correctly written —

A look forword to my senior year
B look foreword to my Senior year
C look forward to my Senior year
D as it is

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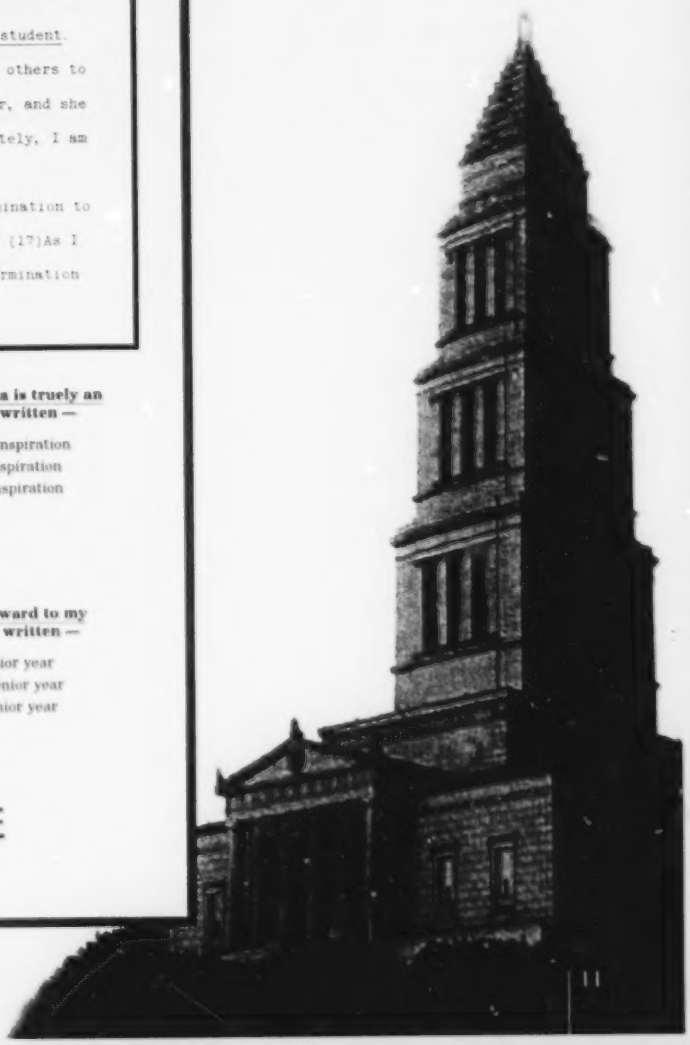

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RELEASED ITEMS

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ENGLISH: *Writing Test – continued*

Direct Writing Component

In the direct writing component, students write a composition about a topic presented to them in a writing prompt. The writing prompt page also includes a "Checklist for Writers" that lists points for students to keep in mind as they write. A writing prompt from the Spring 1998 administration is shown below. Writing compositions are scored on each of the following domains:

- Composing
- Written Expression
- Usage/Mechanics

Scores in the Composing and Written Expression domains are reported as part of the Reporting Category called Plan, Compose, and Revise Writing in a Variety of Forms for a Variety of Purposes. Scores in the Usage/Mechanics domain are reported as part of the Reporting Category called Edit for Correct Use of Language, Capitalization, Punctuation, and Spelling.

WRITING PROMPT ▼ PAGE

End-of-Course

Prompt No. 048

Commonwealth of Virginia
Standards of Learning Assessment

What do you think is the most important skill for students to have learned by the time they finish high school? Write about why you think that skill is important.

CHECKLIST FOR WRITERS

____ I planned my paper before writing.

____ I revised my paper to be sure that
- ____ the introduction to my paper captures the reader's attention;
- ____ my central idea is supported with specific information and examples that will interest my reader;
- ____ the content of my paper relates to my central idea;
- ____ my writing is organized in a logical manner;
- ____ my sentences are varied and read smoothly;
- ____ my word choice develops my purpose and tone; and
- ____ the conclusion brings my ideas together without restating.

____ I edited my paper to be sure that
- ____ correct grammar is used;
- ____ words are capitalized when appropriate;
- ____ sentences are constructed and punctuated correctly; and
- ____ words are spelled correctly.

____ I reviewed my paper to make sure that it accurately reflects my intentions.

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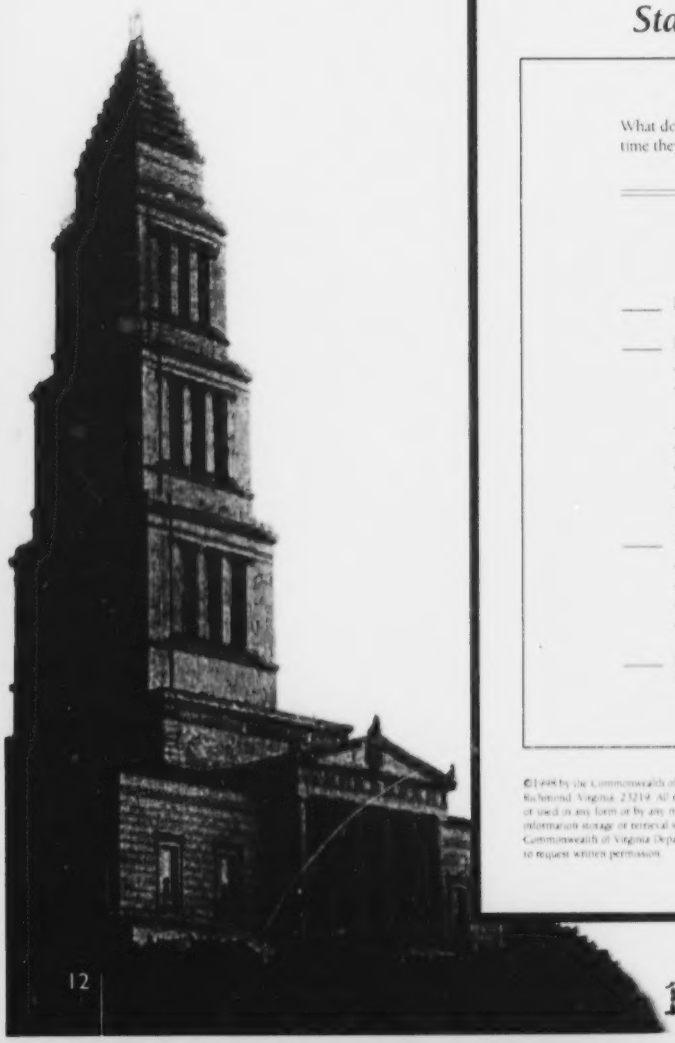

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ALGEBRA I TEST

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RELEASED ITEMS

End of Course

The questions on the End-of-Course Algebra I test address the knowledge and skills contained in the Standards of Learning for Algebra I. Students are permitted to use graphing calculators, rulers, and scratch paper on the test, and a sheet of Algebra I formulas is provided.

The questions from the Spring 1998 test that are shown below are in these Reporting Categories:

- Expressions and Operations *(question 1)*
- Equations and Inequalities *(questions 2 and 3)*
- Statistics *(questions 4 and 5)*

Questions are not available for release from the remaining category, Relations and Functions. That Reporting Category addresses analyzing the relationships among sets of data.

RELEASED ITEMS

1 **A space probe travels 4.5×10^7 miles in one year. How many miles will it travel in 200 years?**

A 9×10^7 mi.
B 9×10^9 mi.
C 204.5×10^7 mi.
D 4.5×10^9 mi.

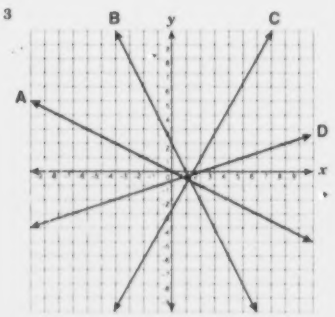
2 **The temperature in a greenhouse must satisfy the condition**

$$155 < 2t - 5 < 165$$

where t is the temperature in °F. Which inequality satisfies this condition?

F $72.5 < t \leq 77.5$
G $75 < t < 80$
H $80 < t < 85$
J $82.5 < t < 87.5$

3



Which line can be best represented by the equation $y = -2x + 2$?

A Line A
B Line B
C Line C
D Line D

4 **The following matrix represents the receipts from the sale of magazines and books sold by 2 sales representatives, Luis and María. Each sales representative receives a 12% commission on their sales.**

	Luis	María
Magazines	$234	$92
Books	$387	$542

Which matrix represents their commissions?

F $\begin{bmatrix} \$28.08 & \$10.94 \\ \$46.44 & \$65.04 \end{bmatrix}$

G $\begin{bmatrix} \$28.08 & \$11.04 \\ \$46.44 & \$65.04 \end{bmatrix}$

H $\begin{bmatrix} \$27.88 & \$10.94 \\ \$47.54 & \$58.64 \end{bmatrix}$

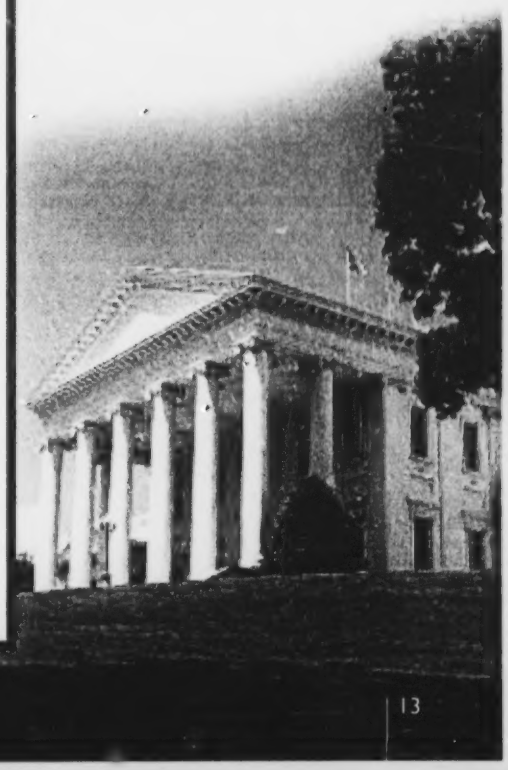
J $\begin{bmatrix} \$28.08 & \$11.04 \\ \$46.44 & \$58.64 \end{bmatrix}$

5

Ages of Listeners to WTHZ	
Stem	Leaf
0	
1	48
2	2334579
3	0244567899
4	0112334689
5	012357789
6	1234578
7	02557
8	01

This stem-and-leaf plot shows the results of a survey of listeners to a radio station. According to the survey, what is the median age of listeners to WTHZ?

A 40
B 44
C 45
D 46



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RELEASED ITEMS

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GEOMETRY TEST

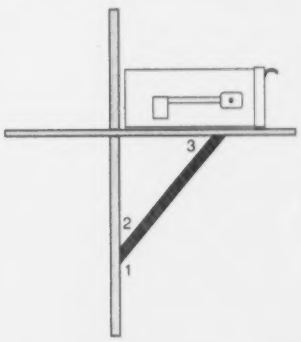
The Standards of Learning for Geometry are assessed on this test. Students are permitted to use calculators, rulers, compasses, and scratch paper on the Geometry test. A sheet of Geometry formulas is provided.

The questions from the Spring 1998 test that are shown below and on page 15 are in these Reporting Categories:

- Lines and Angles *(question 1)*
- Triangles and Logic *(question 2)*
- Polygons and Circles *(question 3)*
- Three-Dimensional Figures *(question 4)*
- Coordinate Relations, Transformations, and Vectors *(question 5)*

RELEASED ITEMS

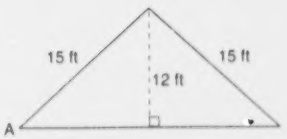
1 **In the installation of a mailbox, a brace is needed to hold up the ledge on which the mailbox is secured.**



If the ledge must be perpendicular to the pole and m∠1 = 130°, what is m∠3?

A 40°
B 50°
C 60°
D 70°

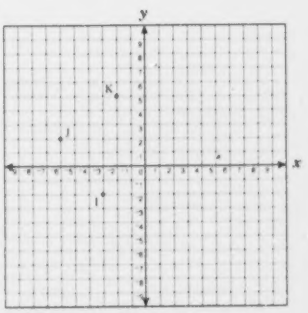
2



If the rise of a loft is 12 feet and the roof rafter is 15 feet, which is closest to the width, *AB*, of the loft?

F 11 ft
G 18 ft
H 22 ft
J 36 ft

3



Quadrilateral *IJKL* is a rectangle. The coordinates of three of its vertices are *I*(−3, −2); *J*(−6, 2); and *K*(−2, 5). If (*x*, 1) are the coordinates of *L*, what is the value of *x*?

A −1
B 0
C 1
D 2

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RELEASED ITEMS

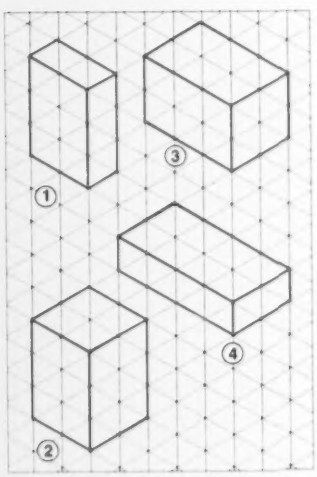
End of Course

GEOMETRY TEST — *continued*

Question 4 is in the Reporting Category of Three-Dimensional Figures. Question 5 is in the Reporting Category of Coordinate Relations, Transformations, and Vectors.

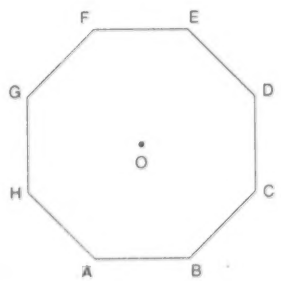
RELEASED ▼ ITEMS

4 **Which two figures are different views of the same rectangular solid?**



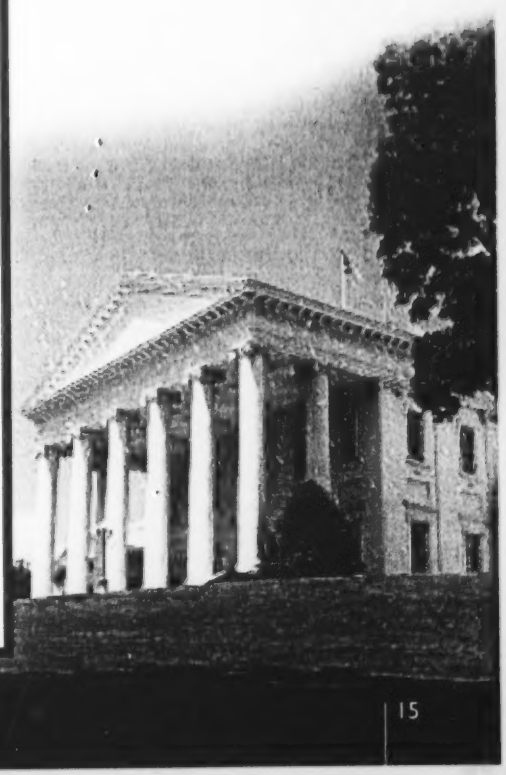
F 1 and 2
G 2 and 3
H 3 and 4
J 1 and 4

5



The image of *D* after a counterclockwise rotation of 90° about *O* is —

A C
B D
C H
D F



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RELEASED ITEMS

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ALGEBRA II TEST

The questions on the End-of-Course Algebra II test address the knowledge and skills contained in the Standards of Learning for Algebra II. Students are permitted to use graphing calculators, rulers, and scratch paper on the test, and a sheet of Algebra II formulas is provided.

The questions from the Spring 1998 test that are shown below and on page 17 are in these Reporting Categories:

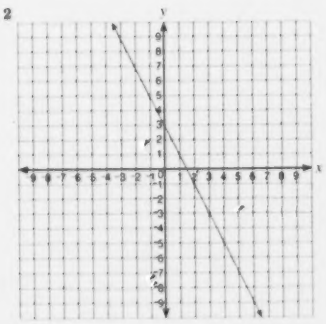
- Expressions and Operations *(question 1)*
- Relations and Functions *(question 2)*
- Equations and Inequalities *(question 3)*
- Analytical Geometry *(question 4)*
- Systems of Equations/Inequalities *(question 5)*

RELEASED ▼ ITEMS

1 What is the total of $\sqrt{245} + \sqrt{125} - \sqrt{80}$?

A $2\sqrt{5}$
B $4\sqrt{5}$
C $8\sqrt{5}$
D $16\sqrt{5}$

2



What is most probably the equation of the function shown?

F $y = -2x - 3$
G $y = -2x + 3$
H $y = 2x - 3$
J $y = 2x + 3$

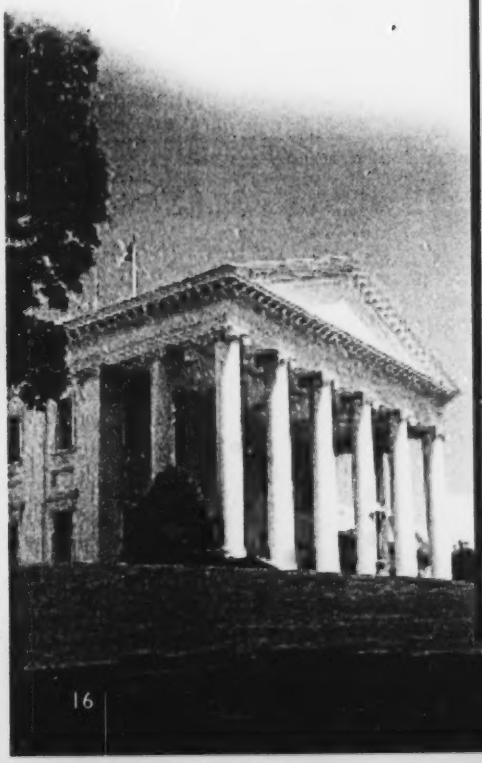
3 What is the solution to $\frac{z-3}{2} = 4z - 5$?

A $z = -\frac{13}{9}$

B $z = -1$

C $z = \frac{2}{3}$

D $z = 1$



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Virginia
Standards of Learning Assessments

RELEASED ITEMS

End of Course

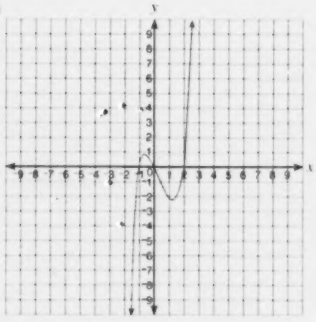
ALGEBRA II TEST – *continued*

Question 4 is in the Reporting Category of Analytical Geometry. Question 5 is in the Reporting Category of Systems of Equations/Inequalities.

Questions are not available for release from the remaining Reporting Category of Statistical Analysis, which addresses analyzing data to make predictions, write equations, and solve problems.

RELEASED ▼ ITEMS

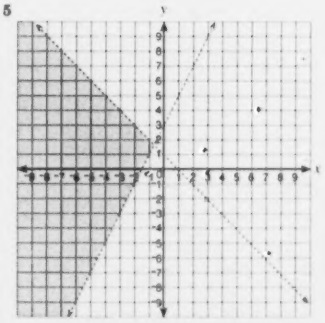
4



Which is most likely a factored form of the function of the graph shown?

F $y = x(x - 1)(x + 2)$
G $y = x(x + 1)(x - 2)$
H $y = x(x^2 + x + 1)$
J $y = x(x^2 - x - 1)$

5



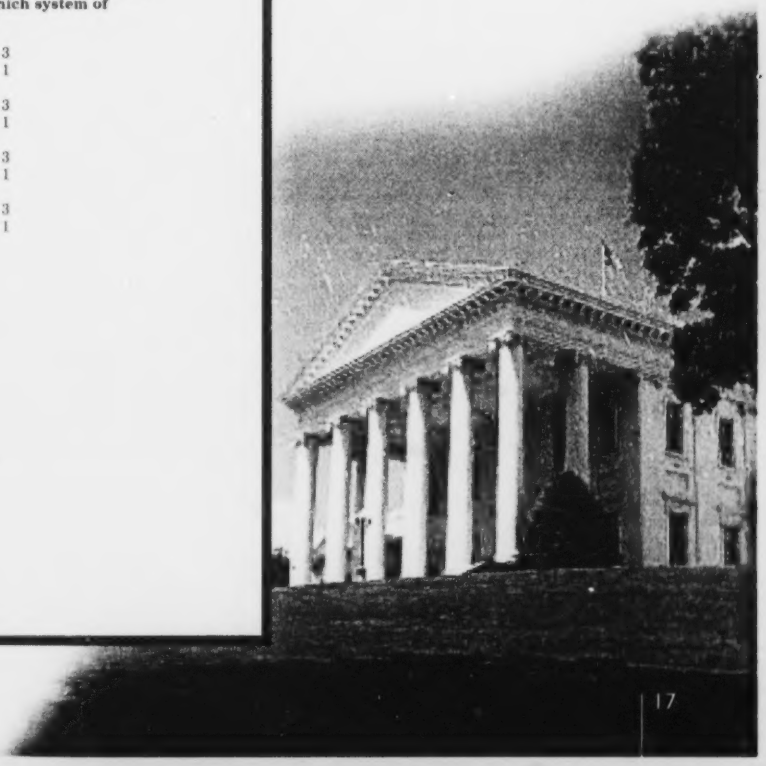
The graph shown represents the solution to which system of inequalities?

A $\begin{cases} -2x + y \geq 3 \\ x + y \leq 1 \end{cases}$

B $\begin{cases} -2x + y > 3 \\ x + y < 1 \end{cases}$

C $\begin{cases} -2x + y \leq 3 \\ x + y \geq 1 \end{cases}$

D $\begin{cases} -2x + y < 3 \\ x + y > 1 \end{cases}$



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RELEASED ITEMS

End of Course

UNITED STATES HISTORY TEST

This test measures Standards of Learning for United States History. Students are asked questions that range from the Age of Discovery and the colonization of Virginia to modern-day issues of domestic policy. Test questions are often presented with a map, graph, or brief passage, as in Question 6 on page 19.

The questions that appear below and on page 19 are in these Reporting Categories:

- History: First Contact to 1789 *(question 1)*
- History: 1789-1877 *(question 2)*
- History: 1877-1945 *(questions 3 and 4)*
- History: 1945 to Present *(question 5)*
- Geography *(question 6)*
- Civics *(question 7)*

RELEASED ▼ ITEMS

1 The American colonists who opposed separation from Britain were known as —

A Sons of Liberty
B Minutemen
C Tories
D Patriots

2 During the Civil War, the North had advantages over the South in all of these categories *except* —

F miles of railroads
G military leadership
H industrial output
J military-age population

3 The United States developed the Open Door Policy toward China as a means to —

A prevent foreign powers from monopolizing trade with China
B stop China from taking over nearby mineral-rich Siberia
C increase Chinese immigration to the United States
D allow the United States to ship goods across China to Russia

4 How did the Great Depression affect population trends in the United States in the 1930's?

F Birthrates declined.
G Immigration increased.
H People married at an earlier age.
J The suburbs grew rapidly.

5 Which practice in schools did the decision in the *Brown v. Board of Education* (1954) case eliminate?

A Affirmative action
B Busing to achieve integration
C Legal segregation in public schools
D Censorship of school newspapers

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RELEASED ITEMS

End of Course

UNITED STATES HISTORY TEST – *continued*

Question 6 is in the Reporting Category of Geography. Question 7 is in the Reporting Category of Civics.

Test questions are not available to be released from the remaining Reporting Category of Economics, which includes knowledge of the causes and effects of the Industrial Revolution and the Great Depression.

RELEASED ITEMS

6 **The turn of the 20th century brought a major migration of African Americans to the North. From 1901 to 1918 the percentages of African Americans working in the Chicago packing houses increased from 3% to 20%. The percentage of African Americans working in the northern steel industry grew from less than 1% to over 10%.**

How did many Northern factory workers view this migration of African Americans?

F Many saw them as cheap labor and a threat to their jobs.

G Many thought the additional population would allow the North to control Congress.

H Many thought this would provide extra workers to ease their burden.

J Many saw new job opportunities in the South.

7 **Which of the following compromises helped ensure Southern support for the proposed Constitution?**

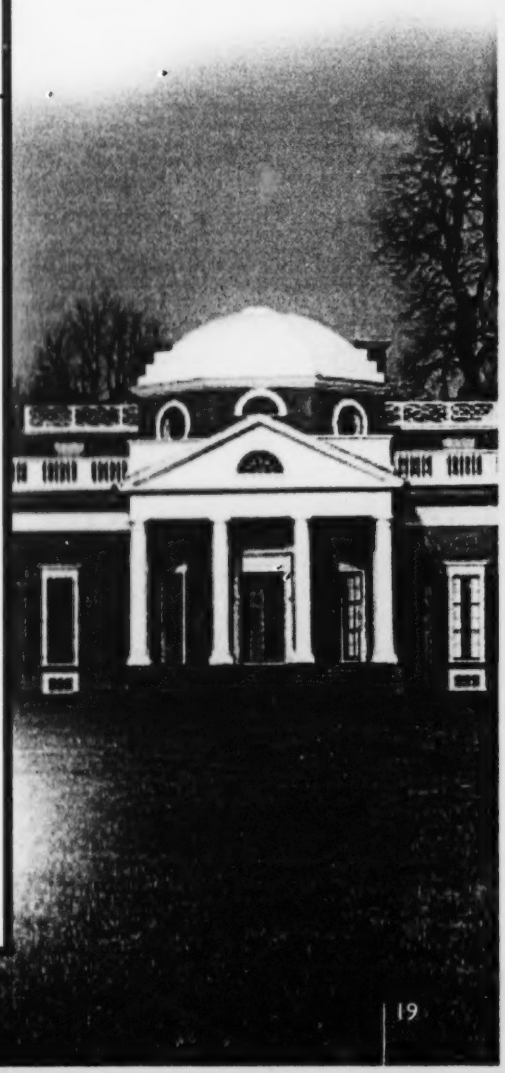
A Creating a bicameral legislature with a House and a Senate

B Allowing the perpetual importation of slaves

C Counting three-fifths of the slave population for purposes of representation

D Enacting a high tariff to support the cotton industry

20



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RELEASED ITEMS

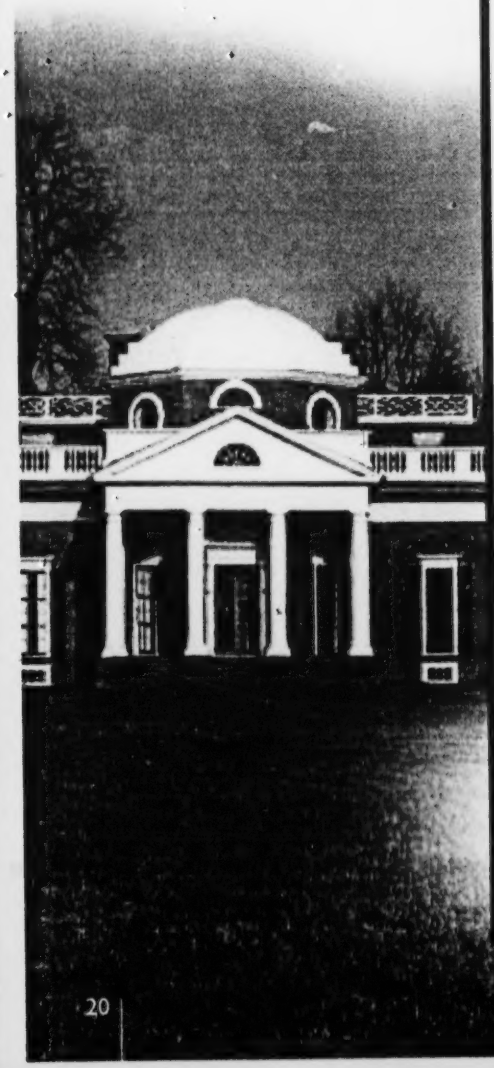
End of Course

WORLD HISTORY TO 1000 A.D./ WORLD GEOGRAPHY TEST

The questions on this test cover the Standards of Learning for World History to 1000 A.D. and World Geography. Test questions are often presented with a chart, as in question 4, or a map, as in question 5 on page 21.

The questions that appear below and on page 21 are in these Reporting Categories:

- Ancient Civilizations *(question 1)*
- Greece and Rome *(question 2)*
- The Middle East, Russia, and Early Medieval Europe *(question 3)*
- History Skills *(question 4)*
- Geography Skills *(question 5)*
- Geography Knowledge and Concepts *(question 6)*



RELEASED ITEMS

B.C. (BCE) Time Line

2,000,000	Development of stone tools begins
500,000	Fire used
400,000	Spears used
15,000	Bow and arrow, spear-thrower developed
8,000	Farming begins
3,000	Written languages developed

1 According to information on the time line, societies became more settled around —

A 3,000 B.C. (BCE)
B 8,000 B.C. (BCE)
C 15,000 B.C. (BCE)
D 400,000 B.C. (BCE)

2 Rome's rivalry with Carthage resulted in the —

F Gallic Invasions
G Pax Romana
H Punic Wars
J First Triumvirate

3 Why were the Muslims unable to conquer Constantinople between the 7th and 11th centuries A.D.?

A The city's defenses and position helped protect it.
B The Muslims were not interested in acquiring the city.
C The Muslims had great respect for the city and would not attack it.
D Western European nations helped defend the city from attack by Muslims.

4

Estimated Population of Western Europe*

Area	500 A.D.	650 A.D.	1000 A.D.
Italy	4.0	2.5	5.0
Spain	4.0	3.5	7.0
France, Belgium, and Holland	5.0	3.0	6.0
British Isles	0.5	0.5	2.0
Germany and Scandinavia	3.5	2.0	4.0

*(in millions)

Which area shows a population trend that is *different* from the other areas?

F Italy
G France, Belgium, and Holland
H British Isles
J Germany and Scandinavia

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RELEASED ITEMS

End of Course

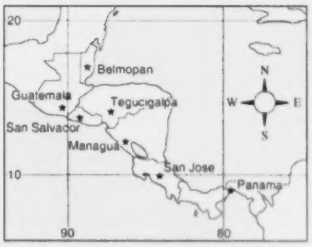
WORLD HISTORY TO 1000 A.D./WORLD GEOGRAPHY TEST – *continued*

Question 5 is in the Reporting Category of Geography Skills. Question 6 is in the Reporting Category of Geography Knowledge and Concepts.

Test questions are not available to be released from the remaining Reporting Category of Asia, Africa, and the Americas, which addresses knowledge and comparisons of early civilizations.

RELEASED ITEMS

5



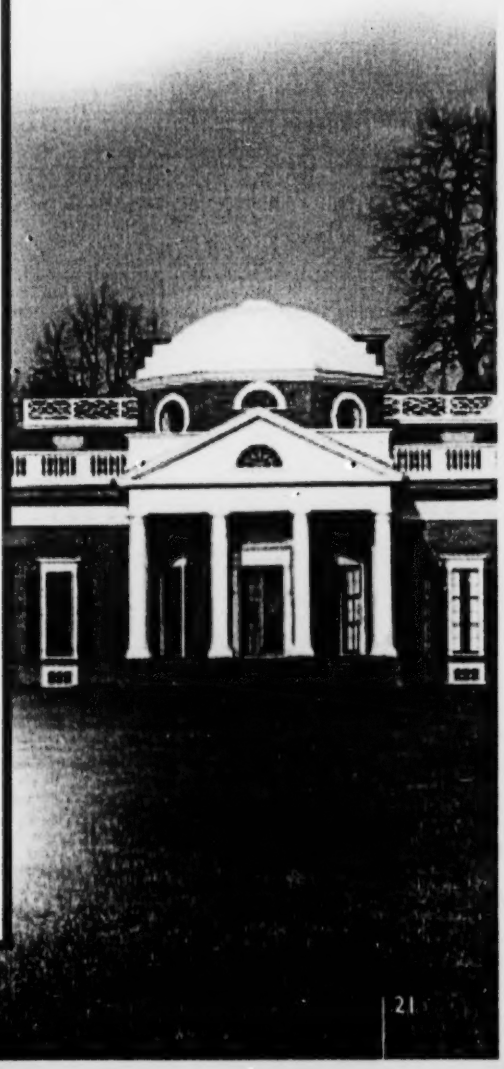
Which city is located at 12° North, 86° West?

A Managua
B Tegucigalpa
C San Salvador
D Panama

6 **Which natural barrier made it difficult for the North African civilizations to interact with those of Western Africa?**

F Deserts
G Mountains
H Impassable rivers
J Lack of seaports

22



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RELEASED ITEMS

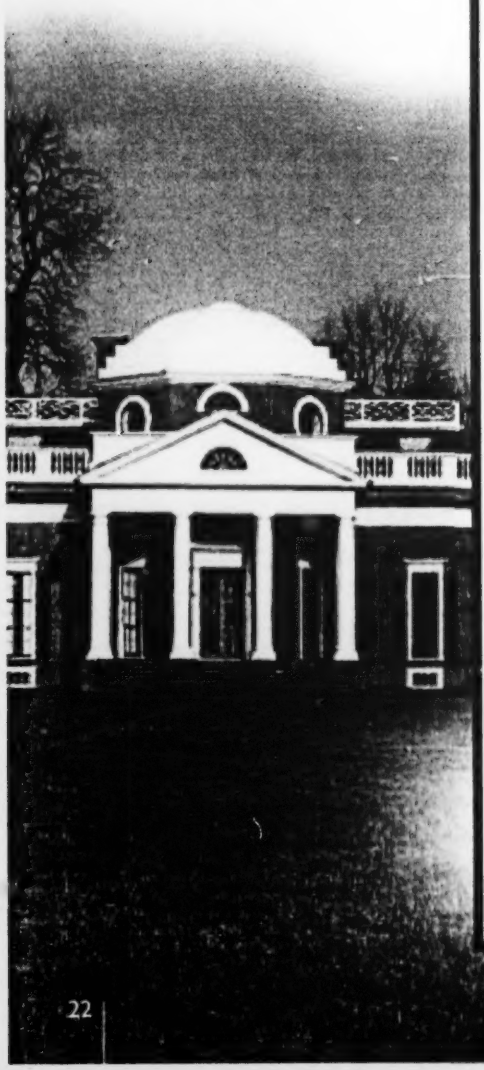
End of Course

WORLD HISTORY FROM 1000 A.D. TO THE PRESENT/WORLD GEOGRAPHY TEST

The questions on this test cover the Standards of Learning for World History from 1000 A.D. to the Present and World Geography. Test questions may be presented with a time line, chart, or a short passage as in question 6 on page 23.

The questions that appear below and on page 23 are in these Reporting Categories:

- Late Medieval Europe: 1000 A.D. Through the Reformation *(question 1)*
- Age of Discovery: Encountering Cultures in the Americas, Africa, Asia, and the Middle East *(question 2)*
- 16th-19th Centuries: The Ages of Enlightenment, Absolutism, and Reason; the Industrial Revolution *(question 3)*
- 20th Century: World Conflicts *(question 4)*



RELEASED ▼ ITEMS

1 European isolation from the rest of the world in the late Medieval period was *largely* ended by the —

A Reformation
B Battle of Hastings
C Enlightenment
D Crusades

2 During the colonial period in Latin America, which group held political and economic power?

F Labor unions formed by workers and peasants
G Descendants of Spanish settlers
H People of mixed Indian and Spanish ancestry
J Indian tribal leaders

3 Which of these was a *major* result of the French Revolution?

A The government was dominated by Catholic Church leaders.
B The burden of taxes was shifted to the lower classes.
C Political power shifted from the nobility to the middle classes.
D Peace and prosperity returned to France immediately.

4 Adolf Hitler's rise to power in Germany was *most* helped by the —

F refusal to admit Germany as a member of the League of Nations
G violent protests against Germany by France and Great Britain
H strong support for his radical policies by the Social Democratic leaders in the Reichstag
J feelings of resentment and nationalism caused by economic and political crises

23

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RELEASED ITEMS

End of Course

WORLD HISTORY FROM 1000 A.D. TO THE PRESENT/WORLD GEOGRAPHY TEST – *continued*

- Geography Skills *(question 5)*
- Geography Knowledge and Concepts *(question 6)*

Test questions are not available to be released from the remaining Reporting Category of History Skills, which addresses historical research through the use of charts, graphs, time lines, and examples of historical documents.

RELEASED ▼ ITEMS

5 **The mouth of the Amazon River is located in —**

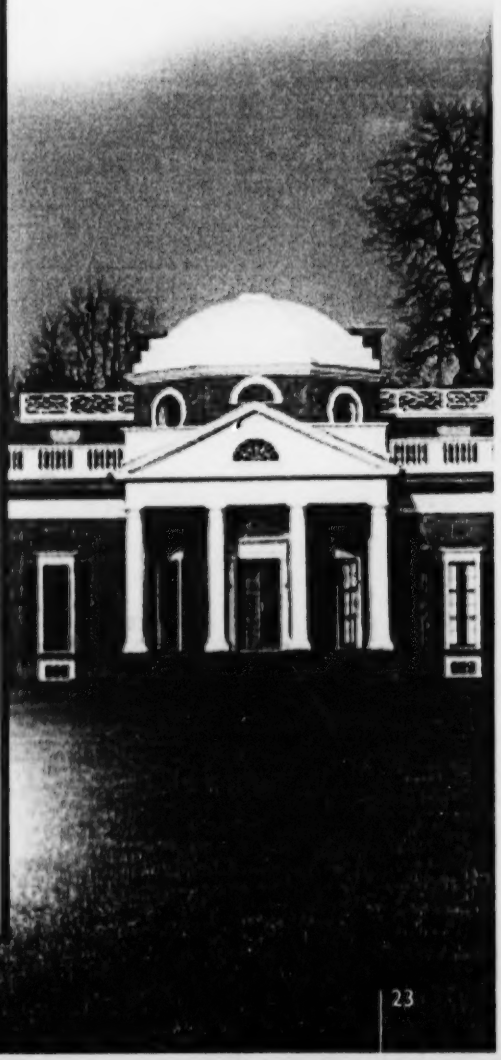
A Brazil
B Argentina
C Venezuela
D Uruguay

6 **The Human Development Index is a rating system that combines life expectancy, adult literacy, and the ability to buy basic human necessities.**

The Human Development Index is *best* used to compare —

F per capita income in United States dollars
G the gross national products of nations
H people's economic and social well-being
J systems of higher education within a region

24



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BIOLOGY TEST

RELEASED ITEMS

End of Course

Questions drawn from the Standards of Learning for Biology ask students to apply knowledge they have acquired in the classroom and/or use information that is in the question itself. Many questions, as in number 2 below and number 4 on page 25, are modeled on experiments that students perform in the lab or classroom.

On all End-of-Course science tests, students are permitted to use calculators and rulers.

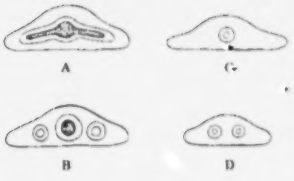
The Biology questions that appear below and on page 25 are in these Reporting Categories:

- Scientific Investigation *(questions 1, 2, 3, and 4)*
- Life at the Molecular and Cellular Level *(questions 5 and 6)*
- Interaction of Life Forms *(question 7)*

RELEASED ▼ ITEMS

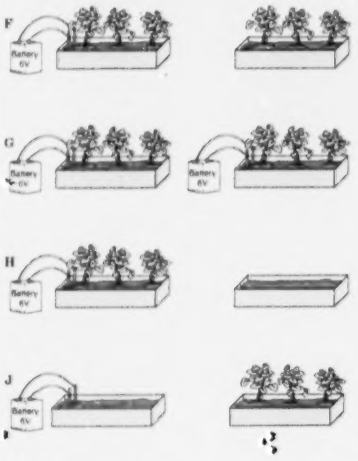
1

The picture above shows a dorsal view of a planarian. Which cross section below was taken from the third area?



2 Hypothesis: Low levels of electricity will stimulate plant growth.

Which of these would be the best setup to test this hypothesis?



25

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RELEASED ITEMS

End of Course

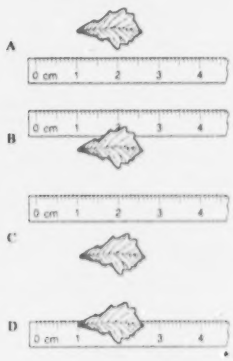
BIOLOGY TEST – *continued*

Questions 3 and 4 are in the Reporting Category of Scientific Investigation. Questions 5 and 6 are in the Reporting Category of Life at the Molecular and Cellular Level. Question 7 is in the Reporting Category of Interaction of Life Forms.

Questions are not available to be released from the final Reporting Category, Life at the Systems and Organisms Level, which covers the life functions of plants and animals, common mechanisms of inheritance, and the bases for modern classification systems.

RELEASED ▼ ITEMS

3 Which method will provide the most accurate and precise measurement of the length of this leaf?



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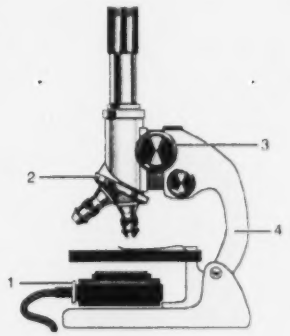
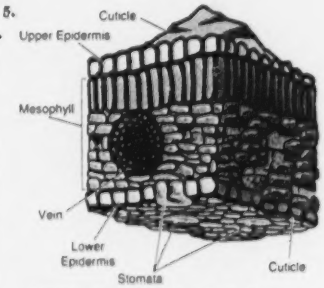


Which of these could be adjusted to change the magnification?

F 1
G 2
H 3
J 4

5.



Which area of the leaf is most responsible for photosynthesis?

A The epidermis
B The mesophyll
C The vein
D The cuticle

6 The mosquito *(Culex pipiens)* has 6 chromosomes in each body cell. How many chromosomes are in a normal egg cell in the female of the species?

F 3 chromosomes
G 6 chromosomes
H 12 chromosomes
J 18 chromosomes

7 Both the Huntley Meadows State Park and the Sky Meadows State Park are just over 1,000 acres in size. Over 50 species of birds nest in the Huntley Meadows State Park, and numerous migrant species also can be seen there. The Sky Meadows State Park, while still an excellent area for birds, has fewer species than Huntley Meadows State Park. Huntley Meadows State Park probably has more species because it —

A is in a cooler part of Virginia
B has a larger open lake area
C has a greater variety of habitats
D is protected from Atlantic storms

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RELEASED ITEMS

End of Course

EARTH SCIENCE TEST

The Standards of Learning for Earth Science address the study of the Earth's composition and structure; its atmosphere, fresh water, and oceans; and its environment in space. Many questions on the Earth Science test include maps and graphs, and students are permitted to use calculators and rulers.

The Earth Science questions that appear below and on page 27 are in these Reporting Categories:

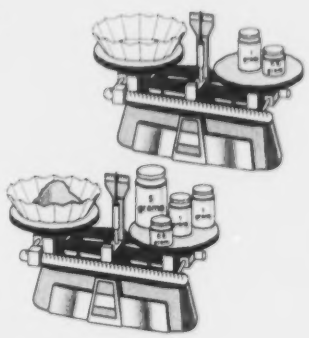
- Scientific Investigation *(questions 1 and 2)*
- Geology *(questions 3, 4, 5, 6, and 7)*
- Meteorology, Oceanography, and Groundwater *(question 8)*
- Astronomy and Space Science *(question 9)*

RELEASED ▼ ITEMS

1

Which topographical map best represents the area shown above?

2



What is the mass of the sand?

F 1.5 grams
G 6.0 grams
H 7.0 grams
J 7.5 grams

27

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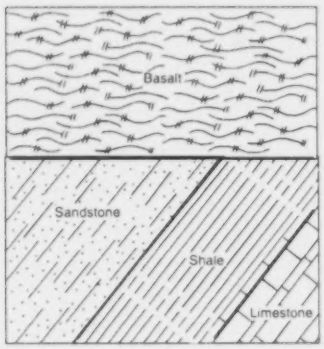
RELEASED ITEMS

End of Course

EARTH SCIENCE TEST – *continued*

Questions 3, 4, 5, 6, and 7 are in the Reporting Category of Geology.

RELEASED ITEMS

3 

Which layer is the oldest?

A Basalt
B Sandstone
C Shale
D Limestone

4 During a flood, which sand grain size will stay suspended in water for the longest period of time?

F Coarse (76.0 mm to 4.7 mm)
G Medium (4.6 mm to 1.5 mm)
H Fine (1.4 mm to 0.05 mm)
J Silt (0.06 mm to 0.0004 mm)

5 Which of these is a metamorphic rock?

A Basalt that cooled rapidly at the Earth's surface
B Gneiss that formed from granite
C Rock salt that formed by evaporation of sea water
D Basalt that cooled under ocean waters

6 Which is a renewable energy source?

F Coal
G Uranium
H Oil
J Wood

7 Mud cracks found in the shale road cuts along the Gate City, Virginia, bypass would show that before the sediments were buried the Gate City area was —

A a migration route for animals
B an active earthquake zone
C a wet area exposed to air
D a sand-covered beachfront

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RELEASED ITEMS

End of Course

EARTH SCIENCE TEST – *continued*

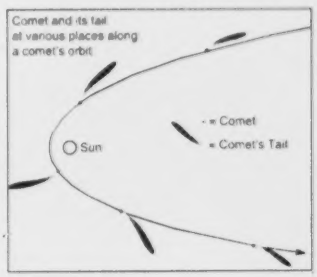
Question 8 is in the Reporting Category of Meteorology, Oceanography, and Groundwater.
Question 9 is in the Reporting Category of Astronomy and Space Science.

RELEASED ▼ ITEMS

8 Which of these can cause the water table in an aquifer to rise?

F Existing wells being pumped
G Few wells being drilled
H Precipitation
J Natural springs

9



What accounts for the position of a comet's tail?

A The solar wind pushes the tail away from the sun.
B The sun's gravity pulls the tail away from the comet.
C The tail is thrown from the comet by centrifugal force.
D Friction causes material in the tail to boil away from the comet.

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CHEMISTRY TEST

Virginia Standards of Learning Assessments

RELEASED ITEMS

End of Course

The Chemistry Standards of Learning are designed to provide students with a detailed understanding of the interaction of matter and energy. The standards emphasize qualitative and quantitative study of substances and the changes that occur in them. In the Chemistry test, students are permitted to use calculators and rulers. They also receive a copy of the Periodic Table of Elements.

The Chemistry questions that appear below are in these Reporting Categories:

- Scientific Investigation *(question 1)*
- Atomic Structure and Periodic Relationships *(questions 2 and 3)*
- Nomenclature, Chemical Formulas, and Reactions *(question 4)*
- Molar Relationships *(question 5)*
- Phases of Matter and Kinetic Molecular Theory *(question 6)*

RELEASED ITEMS

1

	Trials			
	1	2	3	4
Temperature	18°C	18°C	18°C	18°C
Amount of Catalyst	3 mg	2 mg	1 mg	0 mg
Amount of A	5 g	5 g	5 g	5 g
Amount of B	7 g	7 g	7 g	7 g
Time	10 min	10 min	10 min	10 min

$$A + B \xrightarrow{\text{Catalyst}} AB$$

The chart shows the conditions of an experiment involving the reaction of compounds A and B. Which of these was this experiment most likely designed to study?

A The influence of the amount of A on the reaction
B The influence of temperature on the reaction
C The chemical properties of the product AB
D The effect of the catalyst on the reaction

2 Based on trends observed in the behavior of elements in the periodic table, which of these elements would be expected to be most reactive?

F Fluorine (F)
G Sulfur (S)
H Arsenic (As)
J Bromine (Br)

3 Element X belongs to family 2, and element Y is a member of family 15 in the periodic table. A compound formed by the two elements would most likely be —

A X_2Y_3
B X_2Y_5
C X_3Y_2
D X_5Y_2

4 $__ ZnS + __ O_2 \rightarrow __ ZnO + __ SO_2$

When this equation is properly balanced, the coefficient of the SO_2 will be —

F 1
G 2
H 3
J 4

5 $HA + BOH \rightarrow BA + HOH$

The equation shows a typical acid-base reaction. What is formed every time an acid is combined with a base?

A Hydrogen gas
B Oxygen gas
C A salt and water
D Hydrogen peroxide

6 A vessel contains 3 moles He, 5 moles O_2, 10 moles N_2, and 10 moles CO_2. If the total pressure in the container is 2,800 pascals, how much of this pressure is due to the N_2?

F 10 pascals
G 280 pascals
H 1,000 pascals
J 28,000 pascals

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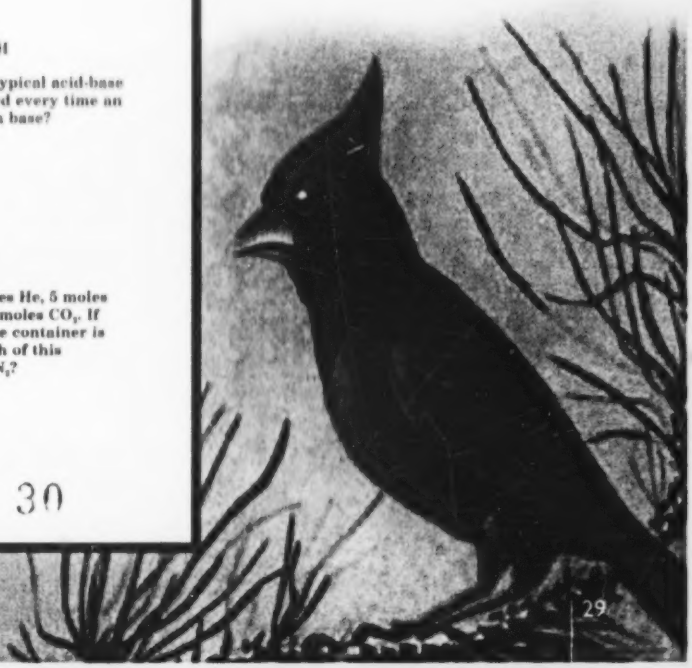

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Virginia
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CORRECT ANSWERS

RELEASED ITEMS

ENGLISH: *Reading/Literature and Research Test*

Page 8
1. C 2. F 3. D 4. G 5. B 6. F 7. D

ENGLISH: *Writing Test*

Page 9
1. C

Page 10
2. J 3. B 4. H 5. C

Page 11
6. J 7. B 8. H 9. D

ALGEBRA I TEST

Page 13
1. B 2. H 3. B 4. G 5. C

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